UNIVERSITY OF TORONTO

Department of University Extension

3. International Trade and Payments

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CORRESPONDENCE COURSE CONDUCTED IN COLLABORATION WITH THE INSTITUTE OF EXPORT AND THE CANADIAN EXPORTERS' ASSOCIATION

CANADIAN EXPORTERS' ASSOCIATION

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While no text-book is prescribed it is suggested that students will gain much information out of the following general reference book:

T.C. Ellsworth: The International Economy (MacMillan)

INTERNATIONAL TRADE AND PAYMENTS

STUDY NO. I

INTERNATIONAL MONETARY RELATIONS.

International trade theory grew out of controversies which raged during the break-down of the medieval European community and the rise of the national state. At this time of the rise of political despotism and of intellectual freedom in the 16th and 17th centuries, the kings became allied with the merchant classes in their struggle against the feudal lords. The economic doctrine that was developed by the merchants is called mercantilism. It was a branch of political theory. To our modern mind, which is accustomed to a certain objectivity in economic analysis, the mercantilist controversies show a glaring connection between argument and the self-interest of the protagonists. Nevertheless, it is possible to distinguish certain assumptions and views that the mercantilists held in common.

Much mercantilistic thought turned around the identification of the precious metals with wealth. This arises from the fallacy of composition, that what is wealth for one individual must be wealth for the society. It is easier today to see that bank notes may make a man rich but that the printing of more notes does not enrich the nation. It was not seen then that the same holds true of the amount of gold and silver in a country. The principal purpose of mercantilistic policy was the accumulation of the precious metals.

Mercantilists gave a number of reasons for their desire to accumulate specie. The more unsophisticated of them wanted gold and silver for their own sake or for a national war chest, but others were able to discern that a growing stock of money had favourable economic repercussions and sought to accumulate precious metals in the country to promote these effects. The world was changing from an economy where trade

took place largely by barter to one where money was used in exchange. This change vastly increased the demand for money which, at that time, consisted of coins of precious metals. Increased trade was only possible because of increases in the stock of money. It was also noted that, when the stock of money increased rapidly, prices and the volume of business rose as a consequence. Inflation provided a stimulus to economic activity: profits were high and unemployment disappeared. Mercantilist economic analysis was undeveloped, as we shall see in the next paragraph, but the ends of mercantilist policy, principally those of stimulating production and combatting unemployment, have again come into prominence in the last twenty-five years. Furthermore, some of the techniques now used, increased governmental control over economic life, especially international trade, and inflationary monetary policies, have mercantilist precedents.

We can distinguish roughly three propositions in mercantilistic thought. Firstly, some mercantilists understood that if a country earned more abroad than it purchased, then the balance would be paid in specie. Secondly, some realized that the price level in a country was positively related to the quantity of money (gold and silver). And thirdly, some realized that the volume of exports and imports depended on the relative price of goods at home and abroad. Arguments as to the appropriate steps that the government should take to increase the importation of specie were based on one or the other of these propositions which were never related to each other. Thus, the government was exhorted to prohibit the importation of "luxuries" or to keep down wages in order to keep down prices and stimulate exports. The welfare of workers was not considered an aim of policy; workers were rather regarded as draught animals whose role it was to render rich the ruling class whose political power was based on wealth.

In the middle of the 18th century a revolution in economic thought took place when the three propositions listed above were related one to the other to form a cohesive theory. David Hume in 1752 in his essay "On the balance of trade", asked what would happen if the quantity of money in a country were multiplied ten times during the night. He concluded that prices would increase ten times (proposition two), that this would stop exports and increase imports (proposition three), and that the country would lose specie until its price level was reduced to its former level (proposition one). He then

carried out the analysis when the country had lost nine-tenth of its money supply during the night, and concluded that in this case it would develop an export surplus and would accumulate gold and silver. The revolutionary character of this analysis lay in the fact that it was an automatic price-specie flow mechanism which did not require any deliberate governmental action for its operation and indeed would set up forces that would nullify governmental efforts at accumulating specie more rapidly than its neighbours. If a country were temporarily successful in accumulating gold this would raise its prices and cause an outflow of treasure. Here was one aspect of the liberal revolution. Market forces automatically regulate the economy and governmental intervention is fruitless and indeed harmful. The prescription of the Classical School to the government was laisser faire, laisser aller. At the same time, and more important as a cause of liberal reform, came the political and moral philosophy that taught that the welfare of a country was not to be measured in terms of the power of the rulers but of the greatest happiness of the greatest number.

The Gold Standard

The mechanism that David Hume outlined is a first approximation of an explanation of the operation of the gold standard, a system of international exchange to which most of the world adhered and under which a vast proportion of world trade was carried on in the sixty years before the First World War and for a few years between the Wars. Thus this is the system Canada has used during most of her past history.

The unique condition for the operation of the gold standard is that the banking system should be legally obliged to buy and sell gold in unlimited quantity and at a fixed price. In Canada the gold content of the dollar was fixed at 23.2200 grains of pure gold; the gold content of the pound sterling was 113.0016 grains of pure gold; The ratio of the gold values of the two currencies, called the mint ratio, was thus $4.8665 to £ 1 and this was also, within narrow limits, the rate of exchange between the two currencies for reasons we will examine below. We will use a two-country example for the sake of simplicity of the exposition of the operation of the gold standard, but it could be extended to include all countries on the gold standard.

Commercial and financial transactions between two countries gave rise to debts and credits between residents of the two countries. The settlement of these credits and debts did not for the most part give rise to shipments of gold between countries; rather the credits and debts in each currency were set off against each other. Thus a Canadian exporter of grain who had acquired a bill of exchange or a bank account in sterling would sell it to a holder of Canadian dollars who wished to obtain sterling in order to purchase British goods, services, or securities, or for any one of a multitude of other reasons.

If it happened that the demand for sterling at the exchange rate of $4.87 = £ 1 exceeded the quantity of sterling that was offered at that rate, then a tendency existed for the rate to rise as would-be purchasers bid against each other for the restricted supply. The dollar price of the pound rose, but it did not rise very far, for, as soon as the price had risen sufficiently above the mint ratio to make it profitable to ship gold to England, the supply of sterling was increased and its price rose no further. At the beginning of this century it cost approximately two cents to cover the cost of transporting one pound's worth of gold across the Atlantic and of insuring it. Thus, if the price of the pound tended to rise above $4.89, it became profitable for exchange dealers to buy gold from the Canadian banking system, ship it to England and there sell it to an English bank for pounds which could be sold to Canadians for dollars at a profit. The exchange rate at which gold flowed out was called the <u>gold export point</u>. The gold export point for Canada was, of course, the <u>gold import point</u> for the United Kingdom. If it happened that Canadian demand for sterling fell off, the price of sterling bills and bank accounts tended to fall and, when it reached a discount from the mint ratio of about two cents, gold would flow in. This was the gold import point of Canada and the gold export point of the United Kingdom. Thus we find that, under the gold standard, the exchange rate was free to fluctuate in accordance with changes in demand and supply within the narrow limits set by the gold points where it set off a flow of gold which prevented any further movement away from the mint ratio. The exchange rate was thus essentially fixed.

A country that was losing gold was obliged to take steps to halt the outflow lest it continue until all the gold

reserves of the banking system were depleted and the banks failed to meet their legal obligation to sell gold at a fixed price, in other words lest the country be forced off the gold standard. The cause of the loss of gold was either that demand for foreign currency had increased in the first country, or that demand for its currency had fallen abroad, in either case the banks in the country losing gold had to take steps to protect their gold reserves by lowering the country's demand for foreign currencies.

The exact mechanism through which the contraction in demand was brought about varied with the banking institutions of each country, but the general principles were the same in each case. The Canadian banking system followed the practice of keeping its loans down to a fixed multiple of its reserves of gold or of assets readily convertible into gold, such as bank accounts in London or New York. Thus, if its reserves declined through an outflow of gold, the volume of bank loans declined by a multiple of this outflow. This made for a decline in business activity, prices, and demand, and for a rise in the rate of interest (the price that rations credit). This decline in demand fell partially on imported goods and, by reducing the demand for foreign currencies for this purpose, contributed to halting the gold outflow. The other influences co-operating to stop the outflow were firstly, the rise in reserves in the other country, which brought about an expansion in demand, part of it going to increase the demand for the goods and services of the first country. Secondly, the fact that prices fell in the first country meant that it was now more attractive to buy at home; whereas for the second country, where prices were rising as a result of the expansion in credit, it became relatively more attractive to import.

Two factors acted to make the outflow of gold less large than would otherwise have been the case. The contraction of credit in the first country made the rate of interest rise there, and the reward to lenders accordingly increase. In the country receiving gold the rate of interest fell, and it consequently became relatively more attractive to lend in country I. The flow of short-term loanable funds from country II to country I in response to the rate of interest differential increased the supply of foreign currency in country I and reduced the necessity for an outflow of gold. It should be noted that funds will only flow in response to an interest differential between

two countries if there is no risk of a future change in the rate of exchange. The second factor was also a flow of capital from country II to country I, but this one was motivated by speculative anticipations. As the exchange rate in country I approached the gold export point, the likelihood of a further cheapening of currency of country I declined, for it could not fall beyond the gold export point; on the other hand, the likelihood increased that it would in the future become more expensive. It thus became advantageous to buy this country's currency when it was cheap, with the hope of selling it later when it was more expensive. The inflow of speculative capital of this sort increased the supply of foreign currencies and reduced, and sometimes abolished altogether, the necessity for an outflow of gold.

We can summarize the functioning of the gold standard under two characteristics. First, the gold standard provided for certainty in the international sphere: the rate of exchange could not change beyond very narrow limits. Secondly, this international stability was only possible if the countries in question always had substantial reserves of gold and this was purchased at the cost of changes in bank credit, the rate of interest, domestic prices, and demand and employment in response to changes in international conditions. That is to say, that if there was a depression in another country and its demand for your goods declined, you would be subjected to a loss of gold and your economy would consequently be faced with the necessity of deflating. Thus we must conclude that the gold standard maintained international stability at the cost of domestic instability.

The growth of democracy during the 19th century brought the lower-income groups into increasing political importance, groups that attached great importance to the avoidance of depressions and the maintenance of full employment. By the beginning of the 20th century governments were reluctant to tolerate declines in domestic credit that were brought about by changes in international conditions. Already at this time we can see traces of the offsetting of the effects of outflows of gold on the banking system by central monetary authorities. When the pressure from outside became too great, countries preferred to abandon the gold standard system rather than suffer from severe deflation. The most important single example of the abandonment of the gold standard was that of the United Kingdom in 1931. The United Kingdom, unlike North America and most of

the rest of the world, suffered from a depression throughout the 1920's because it had set its exchange rate very high when it resumed the gold standard after the First World War and it consequently always tended to buy more abroad than it sold. In order to prevent a drain of gold from its reserves, the banking system followed a very restrictive credit policy which carried with it a high level of unemployment. When the world-wide depression began in the 1930's it increased the pressure on British reserves, for British sales to other countries fell. Both remaining on the gold standard and preserving its reserves would have implied a yet more restrictive credit policy and this was politically impossible. In September 1931 the United Kingdom suspended the legal requirement on the banks to redeem on demand pounds with gold. This occurrence spelled the end of the gold standard, for an important number of countries followed the United Kingdom's example. Many countries now kept the value of their currency stable in terms of Sterling rather than of gold; these formed the Sterling Bloc. Other countries went off the gold standard one by one at about the same time and the international monetary world became transformed from one where exchange rates were generally fixed to one where exchange rates varied either continuously or from time to time.

There have been historical occasions under the gold standard when the gold value of the currency, and therefore the exchange rate, was changed. An example is when the French franc assumed a gold weight in 1928 that was only approximately one fifth of its 1913 weight. But the important characteristic of the gold standard during its hey-day before the First World War was that public confidence in the maintenance of the exchange value of all the major currencies was quasi-complete. Changes could only take place under the most abnormal conditions, such as a catastrophical war. The gold standard which operated between the wars did not benefit from this complete public faith in the immutability of exchange rates, and the system operated more like the one described below under "fixed exchange rates", than like the gold standard described above.

Free Exchange Rates:

Since abandoning the gold standard, Canada has had experience with both a fixed exchange rate with occasional changes in the rate and a free exchange rate. Since October 1, 1950, the Canadian exchange rate has been free to fluctuate in

response to changes in demand and supply with very little interference from the government. Like the gold standard, a free exchange rate is a self-equilibrating mechanism. When holders of foreign currencies for any reason want more Canadian dollars, they bid against each other for the available supply. The increased demand increases the value of the Canadian dollar in terms of foreign currencies. This increase now makes Canadian goods and services more expensive for foreigners and restrains the increase in the quantity of Canadian dollars that they buy. On the other hand, the lowered value of foreign currencies in terms of the Canadian dollar, means that foreign goods and services are now cheaper than they were for holders of Canadian dollars, and encourages an increase in the volume of Canadian purchases abroad and thus an increase in the supply of Canadian dollars on the market. The magnitude of the rise in the price of the Canadian dollar brought about by a given increase in demand for it depends on the elasticities of demand and supply of the Canadian dollar. By elasticity is meant the response in quantity demanded or supplied to a certain change in price. If the change in quantity demanded which results from a change in price is very large, the elasticity is high. More precisely, elasticity is defined as the relative change in quantity divided by the relative change in price. Thus if price rises by 1 percent and, as a consequence, the quantity demanded falls by 2 percent, this gives an elasticity of demand of 2. If the numerical value of the elasticity is greater than one, the demand is called elastic, if less than one, it is called inelastic. Thus if both the demand and supply of Canadian dollars are elastic, an increase in demand will bring about only a slight rise in its value.

Conversely, of course, if the demand of holders of foreign currencies for Canadian dollars declines, this will bring about a fall in the value of the Canadian dollar, but this fall will be limited by the fact that a fall makes Canadian goods and services cheaper to foreigners, who then increase their purchases in Canada, and makes foreign goods and services more expensive to Canadians, who decrease their expenditure abroad. A free exchange rate will thus fluctuate continuously in response to changes in the demand and supply of the currency in question.

The amplitude of the movements of a free exchange rate are dampened by the effect of these changes on the relative prices of imports and exports, as we have seen above.

Speculation works to the same end. Most individuals who engage in transactions on the foreign exchange market have expectations as to what the exchange rate will be in the future.

When the price of foreign currencies is lower than the expected future price, speculators tend to buy foreign currencies for future use or sale. When the price is higher than the expected future price, speculators buy Canadian dollars. In so far as these expectations are correct, speculators on balance buy when foreign currencies are cheap and sell when they are expensive, thus supporting the price when it is low and depressing it when it is high. Speculators, when successful, smooth out fluctuations in the exchange rate. The measure of their success is the profits that they make, for if their estimates are wrong and they buy when the price is high and sell when it is low, they, of course, make losses and unstabilize the rate of exchange.

A system of free exchange rates has the signal advantage over the gold standard of insulating the domestic economy from international conditions. When there was a decline in demand under the gold standard, this brought about an outflow of gold and a contraction in prices and income until the outflow ceased. Under similar conditions with a free exchange rate, all that happens is a fall in the price of the domestic currency. There is no pressure on the domestic banking system, income or employment. In other words, the country is able to pursue whatever domestic monetary and fiscal policies it desires in order to maintain employment, or a stable price level, or achieve other objective, without interference from the rest of the world. The entire international adjustment is borne by the changes in the exchange rate.

The disadvantage of a system of free exchanges when contrasted to the gold standard resides in the uncertainty of the future level of the rate. No uncertainty exists for that one of the participants in any transaction in whose currency the payment is to be made. Even if the exchange rate changes between the time a contract is made and the time of payment, his position will not have changed. The other participant can protect himself by dealing on the forward market in foreign exchange. For instance, if a Canadian importer must make a payment to a United States firm in the future, he

can make sure of the amount it will cost him by buying today United States dollars for future delivery. Unfortunately, no organized forward market exists for distant dates, so that protection is not available for international lenders or borrowers who wish to undertake long term commitments in other currencies. Lending of this sort is riskier with a fluctuating exchange rate than under the gold standard when the rate of exchange was permanently fixed, and such lending is, to a measure, discouraged.

Prices of foreign currencies for future delivery are determined by the demand and supply of foreign currencies for that date, in exactly the same way as is the spot (present day) exchange rate. A relationship exists between the spot and the forward price of a foreign currency. The spot and future rates will tend to diverge by an amount equal to the difference in the rates of interest on short-term money in the two countries. For instance, if the rate of interest is one-eighth percent a month cheaper in Canada than in the United States, but if no premium or discount on the price of United States dollars for future delivery exists, then it is profitable for holders of Canadian funds to buy American dollars now, and sell the same sum forward, say three months. Canadians can now invest their funds for three months at a rate of interest higher than exists in Canada and yet take no exchange risk. The profitability of such a transaction induces further purchases of spot American dollars, which raises their price, and sales of forwards, which lowers their price, until the forward price is at a discount from the spot price of one-eighth percent a month and the possibility of profit disappears, the gain on the rate of interest differential being offset by the exchange loss. Similarly, if the discount on American dollars forward is larger than one-eighth percent per month, it becomes profitable for holders of American dollars to buy Canadian dollars spot and sell them forward, for the gain on the exchange transaction is larger than the loss of interest. Such transactions raise the discount to one-eighth per cent a month. Thus we see that the equilibrium relationship between the spot and the forward rates is determined by differentials in interest rates.

The possibility that speculation might be unstabilizing has been the principal grounds of attack against a free rate of exchange. This thesis holds that, if the public should

at some time acquire expectations that the exchange rate was going to fall, it would bring its expectations about even if they had originally been ill-founded. In other words, if the public becomes frightened and loses faith in its currency, it sells its currency and causes its value to fall even though basic conditions are sound. Canadian experience both at the present and in the 1930's with a free exchange rate furnishes no evidence supporting this view, for the rate has been quite stable and speculation has been of a stabilizing sort. It is, of course, quite true that frightened speculators by selling a currency depress its price, but they can have only a temporary influence. If underlying conditions make for a stronger currency than speculators expect, the latter make losses as soon as they reduce the rate at which they sell. Speculative sales are the cause of the low price of the domestic currency; when the sales stop, the price rises. Speculators are now holding foreign currency worth less than it was when they bought it. In the nature of things, losses cannot go indefinitely. There have been cases of rapidly depreciating currencies where speculation has been blamed for the depreciation. In fact, where these cases have been studied, it appears rather that other conditions, especially domestic inflation, were responsible for the depreciation and that speculators only correctly anticipated the consequence of such conditions on the rate of exchange.

Even in Canada, where, as mentioned above, exchange rates have been very stable, the government has been afraid to leave the exchange rate completely free. The Exchange Fund Account buys and sells foreign exchange with the purpose of "smoothing out temporary fluctuations in the rate of exchange" but not of going counter to basic changes in demand and supply of the Canadian dollar. The operations of the Exchange Fund Account can be seen in the changes in the Official Holdings of Gold and United States Dollars. It would seem that the Fund buys U.S. dollars when their price falls and sells them as it rises. The only justification for having governmental intervention in the exchange market is if the officials are better able to judge when the exchange rate is low and when it is high than can private traders. If private individuals can tell when the rate is low and when it is high, they buy and sell accordingly, thus correcting the movement away from the long-term trend, and no need for government interference exists.

Some problems cannot be avoided by the choice of an appropriate type of exchange system but are common to all systems. We have already discussed the contrasting characteristics of the gold and free standards. Under the gold standard, if foreigners make new investments in a country, say they buy stocks in that country's corporations, this increases the demand for that country's currency, raises its price to the gold import point, and gold flows to it. This causes an expansion in credit, the price level, and perhaps employment, increases this country's demand for foreign goods, decreases foreign demand for its goods, and creates the deficit in the balance of payments on current account that is financed by the continued inflow of capital. Under these conditions, the producers of export goods find themselves disadvantaged compared to their previous position, because their costs have gone up, but foreign demand has not increased. Producers of goods which compete with imports are also disadvantaged and are not unlikely to ask that the government give them increased tariff protection against foreign competition. Importers and consumers benefit, for consumers have higher money incomes and can buy imported goods at unchanged prices. Under a system of free exchange rates, an increase in the flow of capital into a country increases the demand for its currency and raises the price of its currency in terms of foreign currencies. The average level of domestic prices remains unchanged, but nevertheless, the higher exchange rate affects different prices, and therefore industries, differently. Producers of export and import-competing goods are worse off, for foreign prices in terms of the domestic currency are lower. Producers of import competing goods may demand protection. Consumers and importers are better off. In Canada, since the end of 1951, when the price of the Canadian dollar rose by between 5 and 10%, complaints have been heard from some exporting industries that its high value was a burden upon them. Some import-competing industries, notably manufacturers of electrical goods and of textiles, have protested against the advantage this gave foreign producers. Consumers have not complained, nor the booming construction industry into which much of the investment funds have gone. During the first half of 1955, the Bank of Canada has made more credit available and pushed down the rate of interest to an abnormally low relationship to the rate in the United States. This is having two effects. The first is to make it less attractive for Americans to lend in Canada and for Canadians to borrow in the United States. Thus the amount of capital flowing into Canada is reduced and the price of the Canadian dollar is falling. The

second effect is to encourage a greater total of borrowing in Canada, which may lead to increased expenditures principally on investment, and to an increase in income and demand. We may summarize what we have learned from the comparison of the two exchange systems. A contrast exists in that the gold standard maintains a stable exchange rate but has variations in the quantity of money and what that entails whereas a free exchange system permits the maintenance of stable monetary conditions domestically or whatever monetary policy is desired for domestic reasons, but has a fluctuating exchange. Similarity exists in that the same disturbance, a capital inflow in our example, has the same effect on the relative position of different groups in the economy with either system of exchange.

Discussion of the effects of capital movements can be carried a little further to show the similarity of the effects of capital movements under the gold standard and under free exchanges.

Since the First World war, capital flights have been a seriously disturbing influence on international monetary relations. These capital movements take place, not in response to the usual economic motives of speculation or seeking the highest income, but because of fear of loss of capital due to political instability at home or foreign aggression. These flights of "hot money" cannot be controlled by the normal instruments of monetary policy for they seek a safe currency even at a low return. Such capital movements cannot be allowed to influence the economy of the receiving country in the same way as would an ordinary capital movement, for they are typically very large and very volatile. Under the gold standard, inflows of "hot money" are usually "sterilized", which is to say that the inflow of gold that is the counterpart of the capital movement, is not allowed to have the normal expansionary influence on the quantity of money. The gold is kept out of the reserves of the banking system so that it cannot cause inflation when capital flows in, and when the capital flows out again, all that happens is that the gold is shipped. Thus the domestic economy can be insulated from the effect of these erratic flows of "hot money". Since the First World War the United States, especially, has been faced with the necessity of sterilizing inflows of capital, for its strong currency has attracted the most flight capital.

Under a free exchange rate too, the effect of such capital movements must be offset, otherwise, the exchange rate may be pushed very high during the capital inflow, to the detriment of that country's exporting firms which find that their prices are now much higher to foreigners than they had been and they consequently lose some of their market, and to the detriment of the domestic firm producing goods which compete with imports, for imports are now very cheap in terms of the domestic currency. When the "hot money" flows out again, the rate of exchange may be pushed very low, giving exceptional opportunities to exporters and firms producing import-competing goods, but being hard on consumers of imported products. In order to avoid this instability in the exchange rate which accomplished no useful economic purpose, where private speculators are not successful in stabilizing the rate, the Exchange Fund Account should be required to buy with its stock of domestic currency the foreign currencies that are being offered in demand for the domestic currency. Thus an increase in the supply of domestic currency would take place as the demand for it increased which would prevent a rise in its price. Conversely, when the "hot money" flowed out again, the Exchange Fund Account could sell its holdings of foreign currency in exchange for domestic currency and regain its original position. Foreigners would have obtained temporary shelter for their capital and have left the domestic economy unaffected. These prescriptions for action sound simpler than they really are. In both cases, the monetary authorities would have to distinguish between ordinary capital movements and flows of "hot money", and, in the latter case, between those that were temporary and those that were permanent.

Fixed Exchange Rates

The exchange system in most general use in the world today is neither the gold standard nor a free rate but what, for want of a better name, we will call a fixed rate. This rate is not really fixed, as it was under the gold standard, but is maintained at a given value with occasional changes. Canada was on this type of exchange system from the end of the war until 1950, and even now our system of free exchanges is supposed to be only a temporary departure from this system to which we are committed through membership in the International Monetary Fund, discussed in Study III.

At the end of the war the value of the American dollar was $1.10. At this price the Canadian dollar was a little undervalued. That is to say that Canada was earning more foreign currencies by sale of goods, services, and securities than she was spending. In consequence, the foreign exchange reserves of the government were rising. In order to stop this accumulation of exchange reserves, the rate of exchange was raised to parity with the U.S. dollar in July 1946. All that the government had to do to accomplish this change was to announce that it was willing to buy and sell foreign currencies at this fixed price. This meant that no one who wanted to buy foreign currencies would pay more than the official rate of exchange, and that no one who wanted to sell foreign exchange would accept less. To make assurance doubly sure, transactions at other rates were made illegal.

Unfortunately, at this new rate, the Canadian dollar was overvalued, and Canadians bought more foreign currency than they were collectively earning. The consequence was a rapid depletion of the government's holdings of foreign exchange. At this point the government was faced with three choices. It could either devaluate the dollar to some new value, or it could free the rate of exchange and allow it to find its own level, or it could impose more severe exchange control than then remained from the war and further restrict by legal means the amount for foreign exchange that Canadians could buy.

The third choice was made, and the government imposed very severe restrictions on the use of foreign currencies by residents of Canada. The economic effects of exchange control will be discussed in Study III. All that we have to note at this point are some of the characteristics of a fixed rate of exchange. If the exchange rate is not to be changed for extended periods of time, that is to say, if the rate is to be really fixed, and if, as well, the government is unwilling to interfere with the freedom of individuals in economic life, then it has to act with a fixed rate of exchange as if the country were on the gold standard. When residents tend to buy more foreign currency than they earn, the government is faced with the necessity of protecting its exchange reserves, just as, under the gold standard, the banking system is obliged to protect its reserves of gold and assets readily convertible into gold. In this case, the Bank of Canada must compel the banking system to contract credit in order to decrease domestic demand for foreign currencies and, if possible, to increase the supply of foreign currencies. When the country is earning

more foreign currency than it is spending, and the government has accumulated an adequate amount of foreign exchange in its reserves, the central bank can permit an expansion of the banking system. In this case then, a fixed exchange rate functions in identically the same way as the gold standard.

If, on the other hand, the government is unwilling to sacrifice its autonomy in monetary matters and wishes to be free to pursue a monetary and fiscal policy best suited to its needs in the light of domestic conditions without interference from international economic conditions, it is obliged either to alter the value of its currency very frequently ot to resort to exchange control. For instance, if it pursues a full employment policy domestically in the face of falling demand for the country's exports, the consequence is a loss of exchange reserves. Since it is unwilling to cause a contraction at home either it will eventually run out of foreign exchange reserves and be unable to fill the gap between earnings of foreign exchange and expenditures, and thus be unable to continue supporting the fixed rate, or it will have to curtail the demand for foreign exchange without curtailing total demand at home and will do this by not permitting individuals to purchase foreign exchange except with special permission. By using legal restrictions on purchases of foreign exchange it will be able to cut down the demand for it to an amount equal to the available supply. We can conclude, therefore, that where the government is unwilling to act as if it were on the gold standard but still wishes to have a fixed rate of exchange, it will necessarily be led sooner or later to the use of exchange controls.

Setting aside the case of exchange control, we find that fixed exchange rates resemble the gold standard except that if the pressure on the exchange reserves is very great and that a politically intolerable amount of deflation would be necessary to correct it, the rate can be changed to another fixed level. This softening of the rules of the gold standard is a benefit, but it carries with it a disadvangage which neither the gold standard nor a free exchange are faced with: unstabilizing speculation. The public is well aware when there is pressure on the rate of exchange in either direction. The greater is the pressure, the greater are the expectations of a change in the exchange rate. Since virtually no risk exists that the exchange will change in a direction opposite to that in which it is expected to move, speculators can take positions

against the government's exchange agency with virtually no risk. For instance, if it is expected that the price of foreign currencies is going to rise, because Canada is buying more from the rest of the world than it is selling and the exchange agency is running short of gold and U.S. dollars, a speculator would be advised to buy American dollars. The risk of a fall in the American dollar would be virtually nil, and the worst that could happen would be no change in the rate of exchange. By increasing the demand for American dollars the speculator is increasing the pressure on the government to devaluate the Canadian dollar. After devaluation the speculator buys back Canadian dollars, making a capital gain equal to the extent of the devaluation. Conversely, if an appreciation in the value of the Canadian dollar is expected, speculators sell U.S. dollars and buy Canadian dollars until after the appreciation has taken place.

Thus speculation in a system of fixed exchange rates causes wide and erratic speculative movements of capital which make the maintenance of a fixed rate more difficult. Before the 1946 appreciation of the Canadian dollar, a large inflow of capital into Canada took place, putting upward pressure on the dollar. Once the dollar had appreciated and these expectations had been fulfilled, most of this speculative capital, having made its gains, flowed out again and put downward pressure on the Canadian dollar. When speculative expectations are not fulfilled immediately, the capital movements tend to become cumulative. The Canadian dollar had been devalued in 1949 back to \$1.10 = U.S. \$1.00. After this, expectations became quite strong that it was undervalued and that a renewed appreciation would take place. As a consequence, capital began to flow into Canada. The more foreigners purchased Canadian dollars, the more expectations of appreciation became confident, and the greater became the inflow of capital. In the third quarter of 1950 the inflow was huge and the government set the Canadian dollar free. Speculators had forced the government's hand and hastened an appreciation they considered likely. The Canadian government tried three times to find an appropriate value for the Canadian dollar, had been unable to do so, and had been faced with speculative capital movements which frustrated or made harder its task of maintaining a fixed exchange rate. In 1950, it decided to let the market determine the proper rate of exchange, a task it has performed

effectively since then. In a free market, speculation is not unstabilizing, for the price is determined at every moment by the expectations of buyers and sellers. If expectations of a fall in price increase, this immediately brings forth more sellers and lowers the price now so that no further speculation takes place or it is offset by speculators on the other side of the market.

The Canadian Balance of International Payments

Official records are kept of all the payments that are made by a country over its national boundaries. The account is called the balance of international payments, and is so drawn up that the credits and debits are equal. The Canadian accounts of transactions are available on both a quarterly and an annual basis from the Dominion Bureau of Statistics. The payments are divided into those arising from purchases of goods and services and those from loans and gifts. The first classification is called the current account. In it are listed all the purchases and sales of goods and services. Payments made to Canada are listed in one column, and are given positive values. The most important of these credits is for merchandise exports. But also important are exports of services of different sorts. The tourist and travel expenditures that foreigners make in Canada are payments to Canada of exactly the same sort as those which arises from the sale of goods to foreigners. Interest and dividends on Canadian holdings abroad are payments for the service of Canadian capital used abroad. Freight and shipping charges are paid for the use of Canadian transportation facilities. Canadians also receive inheritance from abroad and immigrants bring funds with them. All these payments give rise to credits in favour of Canadians as do other minor sources of foreign earnings that we need not mention here. On the other side of the accounts we find the debits that arise from Canadian purchases of foreign goods and services. These fall into roughly the same categories as do the current receipts, though their relative importance is not the same. For instance, in 1954, the value of Canadian merchandise imports and exports was the same, but Canadians paid $443 million in interest and dividends to foreigners and received only $136 million from abroad under this heading.

The Canadian Balance of International Payments, 1947, 1949, 1951 and 1954

	1947	1949	1951	1954
	(millions of dollars)			
Current Receipts:				
Merchandise exports	2,723	2,989	3,950	3,929
Gold production available for export	99	139	150	155
Travel expenditures	251	285	274	300
Interest and dividends	64	83	115	136
Freight and shipping	322	303	351	306
Inheritances and immigrants' funds	69	68	77	91
All other current receipts	220	222	249	308
Total current receipts	3,748	4,089	5,166	5,225
Current Payments:				
Merchandise imports	2,535	2,696	4,097	3,920
Travel expenditures	167	193	280	380
Interest and dividends	337	390	450	443
Freight and shipping	278	253	354	341
Inheritances and emigrants' funds	49	59	70	93
Official contributions	38	6	9	10
All other current payments	295	287	423	465
Total current payments	3,699	3,912	5,683	5,652
Current Account Balance	+ 49	+ 177	- 517	- 427

(cont'd)

The Canadian Balance of International Payments, 1947, 1949, 1951 and 1954 (cont'd)

	1947	1949	1951	1954
	(millions of dollars)			
Capital movements (summary):				
Direct investment in Canada	+ 61	+ 94	+ 309	+ 325
Direct investment abroad	+ 6	+ 13	- 20	- 70
Canadian securities				
Trade in outstanding stocks)	- 13	+ 8	+ 38	(+ 121
Trade in outstanding bonds)				(- 66
New issues	+ 95	+ 105	+ 411	+ 318
Retirements	- 364	- 147	- 184	- 192
Foreign securities	+ 5	+ 20	+ 15	- 21
Official Loan (repayment,+)	- 528	- 102	+ 68	+ 72
Canadian dollar holdings of foreigners	- 26	+ 40	- 192	+ 26
Official holdings of gold and foreign exchange (increase, -)	+ 742	- 128	- 56	- 124
Other capital movements	- 27	- 80	+ 128	+ 38
Net capital movement	- 49	- 177	+ 517	+ 427

Source: Canada, Dominion Bureau of Statistics, The Canadian Balance of International Payments, 1946 to 1952, and Preliminary Estimates 1954.

In 1954 Canadians received payments on current account of $5,225 million and made current payments to foreigners of $5,652 million. Thus they purchased goods and services worth $427 million more than they sold. Such a balance on current account is called unfavourable, negative, or passive. The origin of the term unfavourable is to be found in mercantilist preconceptions. As we have seen, the accumulation of gold was to them the principal object of foreign trade. A surplus of imports over exports which led to an outflow of gold was obviously considered unfavourable. In fact, of course, in a well run economy, obtaining more goods and services from abroad than are exported increases the possibilities for consumption or investment, and cannot be considered a disadvangage. Nevertheless, the term has persisted. In other years, 1949 for example, we have had a surplus on current account.

A country can only import more than it exports if it pays for the current account deficit by drawing down its accumulated reserves of gold and foreign exchange, by borrowing from foreign countries, or by receiving gifts from them. These transactions are listed in the capital account where we find credits and debits. As in the current account, a credit is any transaction which provides Canada with foreign currency. Thus, if foreigners build a plant in Canada this item would be a credit under Direct Investment. Similarly, if foreigners buy new or outstanding Canadian government bonds or other securities, or foreign securities held in Canada, these transactions would be considered as credits. Conversely, transactions which involve payments to foreigners are debits. For instance, when Canadians retire securities from abroad, or when the Canadian government makes official gifts or loans to foreigners, or when the Canadian government increases its holding of foreign exchange, these transactions are considered to be debits. When Canada had a deficit on current account, this debit was covered by a commensurate credit on capital account. In other words, the funds arose from net borrowing. This does not mean that each item in the capital account was a net credit, but that all of them taken together added up to a credit. In other words, when we had a deficit we increased our foreign indebtedness. If we could not have borrowed, we could not have bought more than we sold, except by selling our accumulations of gold and foreign exchange.

This discussion does not imply any causal connection between the current and the capital account. A deficit on

current account may cause a capital inflow, or be caused by it. Canada might be able to have a deficit on current account because foreign sellers were willing to extend short-term credit to finance the excess of imports. On the other hand, the current account deficit might arise because foreign investors wanted to make investments in Canada and brought in equipment and services from abroad with the funds they were investing. In the first case the inward capital movement is called induced, in the second case it is called autonomous. This is an analytical distinction not made by the balance of payments statement which is simply an accounting statement of what has happened.

The account that we have been describing is the balance of payments of Canada with the rest of the world, and it must necessarily balance. This is not the case when we look at our balance with each separate country. For instance, in 1951 we purchased on current account $951 million more than we sold to the United States; the inflow of capital from the United States was only $397 million. Thus we had an overall deficit with the United States which had to be covered with earnings from overall surpluses with the other countries of the world.

International Investment

Except in times of political uncertainty, the general pattern of capital movements is from countries where capital is abundant and the rate of interest low to countries relatively more heavily endowed with other factors of production (natural resources and labour) where the returns to capital are higher. The rationale is obvious: owners of capital seek to invest it where the returns are highest and will invest abroad if the rate of interest there is sufficiently higher to make it worth their while to incur any additional risk or trouble that might be involved.

Such a transfer of capital from a capital-rich to a capital-poor country increases the productivity of the world as a whole, for production is reduced in the country losing capital by an amount indicated by the low rate of interest prevailing there, and is increased in the receiving country by an amount indicated by the higher rate of interest there. The reason for this assertion is the observable phenomenon

described by the principle of diminishing returns, that the productivity of a factor of production depends upon the amount of other factors with which it is combined. The principal determinant of the high labour income in Canada is the large amount of equipment with which each worker is provided. This, more importantly than any differences in innate characteristics, explains why working people here are better off than in underdeveloped countries such as India. Expenditures on education of our labour force must, of course, be considered principally as a productive investment, for the efficiency of labour is very greatly affected by the development of its general knowledge and imagination. The principle of diminishing returns states that as increments of one factor of production (land, labour, or capital) are added to a fixed quantity of other factors, total output will increase but at a diminishing rate until this first factor is so abundant that additions to the supply will no longer increase output. The stage would eventually be reached where further increments will actually interfere with efficient production and decrease total output. No one would ever produce with such a combination of factors unless he were being paid to use the abundant factor as might be the case where, for instance, apprentices pay fees.

In a world where economic and political conditions were stable and where the residents of each area had good information about conditions existing elsewhere, we would find that capital flowed easily and amply from low interest rate countries to countries where the productivity of capital was higher. This is what occurs between the United States and Canada. The rate of interest is usually lower in the United States than in Canada, so that some Canadian borrowers are tempted to borrow in the United States, and Americans are tempted to invest in Canada. A small differential in the earnings of capital in the two countries is sufficient to stimulate such a flow. The differential normally varies between one-half and three-quarters of one per cent per annum on long-term government bonds which reflect in a general way the difference in the availability of capital in the two countries. This flow of capital benefits the Canadian standard of living by increasing the tools with which our labour force can operate. It also increases the income of the United States by giving owners of capital an opportunity to receive a larger return than if they loaned at home.

But such a free flow of capital between countries is the exception rather than the rule. Paradoxically, it is between two countries which are both rich in capital that capital flows most smoothly, whereas capital flows hardly at all between capital-rich countries and the underdeveloped countries where capital is very scarce and rates of return on capital are typically very high. The reason for the failure of capital to flow to areas of great scarcity is only partly explained by ignorance on the part of capital-rich countries of opportunities for profitable investment in poorer countries. Knowledge today is certainly as great as it was during the 19th century when the United Kingdom, the then richest country, made very large investments abroad. The principal change that has occurred is the rise in nationalism in underdeveloped countries which has led to the restriction of the freedom of action and of the security of foreign investors.

It has been estimated by the United Nations that $10 billion per annum would have to be invested in the underdeveloped countries of the world in order to raise the per capita income there by 2 per cent per annum. In fact, the amount of private investment by foreigners in underdeveloped countries is very small. Total private foreign investment by the United States in 1953 was only $729 million, and most of this went to Canada and Europe. Official sources of foreign capital are discussed in Study III, but these too are quite inadequate by U.N. standards.

Most foreign investment in underdeveloped countries is direct, in the sense that the control of operations in the country receiving the investment is retained by foreigners. This is the case, for instance, where branch plants of a company are established abroad. The risk attendant on such investments is greater than on similar ventures at home, for the freedom of the firm is restricted by laws more stringent than at home and often discriminatory against foreign enterprises. Exchange control, which is typically used in underdeveloped countries, usually prohibits the repatriation of capital, and sometimes does not allow the repatriation of earnings. It often increases costs by obliging industries to buy within the country at prices higher than would be obtainable abroad. Other laws sometimes provide for the employment of a certain proportion of native labour which, when little trained labour exists, impedes the efficient operation of the firm. This is not to suggest that these laws are not frequently brought about

through the abuses of power of foreign-owned companies in small countries, nor that the companies in the past have done enough to promote the development of skills in the native labour force. But whatever the merits of the case may be, such restrictions do reduce the attractiveness of foreign investment. The danger most feared by foreign-owned firms, of course, is that of expropriation by the government of the underdeveloped country, sometimes with only inadequate compensation, if any at all. These expropriations are motivated by nationalistic sentiments, political convictions, or greed.

The development of domestic firms in underdeveloped countries which might borrow abroad to meet their needs for capital (indirect investment) is frequently limited by scarcity of managerial ability and the desire to bear risks in those societies. With a low level of income, the volume of savings is small and is concentrated in the hands of the small high-income group. These funds are typically used, not in commercial or industrial enterprises, but in land purchase and the making of short-term real estate loans that bear a high return. Skill in the art of management do not have occasion to develop and frequently the paradoxical situation arises of rich individuals exporting their funds for investment in New York or London. Thus the occasion for loans by capitalists in capital-rich countries to native firms in underdeveloped countries, which would avoid the difficulties that attend the operations of foreign-owned firms, is very rare.

Let us turn to see how the foreign investment affects the balance of international payments. When a Canadian borrows money from an American and leaves these funds in a bank in New York, no net capital movement has taken place. Canadian indebtedness to the United States has risen by the loan, but this is offset by their increased liability of the bank towards a Canadian. When the borrower spends his bank account on American goods and services which he imports into Canada, the capital movement takes place, for the bank's liability disappears, but the Canadian's liability, of course, does not. A capital movement into Canada can only take place by a current account deficit.

International Trade and the National Income

In order to discuss the way in which international trade affects the level of domestic income, we must first

examine the process of income determination in a country where no international trade exists.

The value of all the final goods and services produced during one year is called the Gross National Producer. It can be measured by adding together all the final sales of goods and services that are made during a year and subtracting from this total any decline in inventories or adding any increase in inventories. This same figure can be derived by adding together all the incomes received by factors of production and thus obtaining the net national Income to which depreciation and indirect taxes are added to reach the Gross National Product.

The size of the GNP is determined by the circular flow of income between the public, business, and government. Business pays out wages, interest, rent, and profit to the public. But the public does not return all this income to business by spending it on goods and services for consumption. People will wish to save part of their income to provide for their old age, to guard against an emergency, or for any number of reasons, including speculation. If no other factor intervenes, payments to business will be less than payments from business, and people's attempt to save will have resulted in a decrease in the circular flow of income. In fact, this leakage of purchasing power may be offset by expenditure on net investment. In economics investment is used to mean the purchase of new equipment, buildings, and inventories, not the purchase of already existing machinery, buildings, or securities. Net investment refers to investment above what is required merely to replace existing equipment that is wearing out.

Net investment will represent a net addition to payments to business. It may be smaller than, larger than, or equal to, the amounts people wish to save. "When business firms as a whole are paying out more than they get back they will then contract their operations and national income will tend to fall. When they are getting back more than they are paying out, they will increase their production, and national income will rise. Only when the level of scheduled saving is exactly equal to scheduled investment will business firms be in aggregative equilibrium. Their sales will then be just enough to justify continuing their current level of aggregate output, so national income will neither expand nor contract." (Paul A. Samuelson, Economics, p. 277).

There is no tendency for savers to wish to save just the amount investors wish to invest. Investment takes place largely through the business enterprise. It is dependent on the opening of new business opportunities and the discovery of new techniques and products. It is consequently subject to wide fluctuations which are reflected in changes in the size of the national income. On the other hand, the decision to save is made largely by individuals for reasons which are highly customary and remote from those determining investment expenditures.

An increase in government expenditure will have the same effect as an increase in net investment. If the national income is not sufficiently high to provide full employment the government may supplement a deficient level of net investment by expanding its expenditures without expanding its taxes. (Higher taxes would cause a decrease in consumption, expenditures, and, hence, in the national income).

If we extend our analysis to a country which also engages in international trade, we find that the determination of incomes is more complex than in the above case. Imports, like savings, are a leakage from the flow of income. Expenditures are made which do not go to form the income of other individuals in the economy but go to producers in other countries. Exports, on the other hand, have an effect on domestic income identical to that of domestic investment or government expenditures. They are a source of income for domestic producers which does not come out of current consumers' income. Thus, in order to complete our analysis of the determinants of national income we must add to domestic investment a concept which is called net foreign investment and which consists of exports minus imports. Other things being equal, the larger is net foreign investment, the greater will be the stimulus to domestic income. The absolute level of exports and the level of domestic investments are not independent of each other, especially in Canada where the export industries are few, important, and cannot be converted to produce for the domestic market. In this situation a high level of exports carries with it a high level of domestic investment in the large and important export industries. Therefore, high exports usually mean a high level of income. When the level of exports is low, investment in export industries is low or non-existent, and in the absence of heavy investment for the domestic market in, say, housing, the national income is low.

The realization that a positive balance in current account stimulates domestic income is one of the sources of pressure for various protective devices which tend to grow in times of unemployment. At such times each country, striving to relieve depression within its borders, is tempted to use any means of achieving this goal. It is tempted to raise its tariff, impose strict quantitative restrictions on its imports, subsidize its exports, or depreciate its currency, in order to develop as large an export surplus as it can. This practice has only harmful results for the world as a whole, as our experience in the 1930's has taught us. A country can only export more than it imports if other countries import more than they export. Hence a country can only stimulate its own employment through the development of a surplus on current account by promoting unemployment abroad. The policies we have described above are thus aptly described as "beggar-my-neighbour" policies or "exporting unemployment". But the countries which are suffering from a decline in exports because of another country's success in exporting unemployment are not likely to remain passive. They will rataliate by themselves reducing their imports and trying to stimulate their exports. The result of beggar-my-neighbour policies is not that any country will succeed in developing an export surplus, but that every country will reduce the level of its imports and that the volume of international trade will decline. The world as a whole will lose the benefits which accrue from international specialization through trade, and will not make any gains from an increase in employment, since any country's success will be at the expense of some other country.

These policies have also been dubbed "neo-mercantilism", for they are a return to the international commercial strife of Renaissance. Trade is no longer a way by which countries maximize their income by mutually advantageous exchange, but is a form of economic warfare in which each country's gain is made at the expense of other countries. International economic bodies have appeared since the Second World War, whose purpose it is to curb the use of such short-sighted and mutually defeating policies by member countries and to restore a measure of harmony in trade. We will discuss these in Study III.

The appropriate method of combatting unemployment is for each country to pursue domestic policies which tend to stimulate income: government expenditures, low rates of interest, low taxes, high unemployment benefits. In such a world a deficit or a surplus on current account is neither a good nor a bad thing, for it is the result of imports or exports of

capital which are guided by considerations of profit and lead to the maximization of the national and world income.

STUDY NO.I

A S S I G N M E N T

Answer Questions 1 and 2 and any 2 other questions.

1. Compare the functioning of the gold standard and free exchange rates.

2. Compare the functioning of the gold standard and fixed exchange rates.

3. What is a favourable balance of trade? Is it a desirable goal?

4. What is a favourable balance on current account?

5. How far is it true to say that exports pay for imports?

6. When one country lends to another, what is transferred between them? What is the effect of the loan on the balances of payments of the lender and the borrower?

7. In what ways can international debts be discharged?

STUDY NO. II

THE THEORY OF INTERNATIONAL TRADE

The Gains from Trade

So far in this discussion, we have seen how payments are made between countries and the consequences of different types of exchange system, but we have not enquired why it was that international trade took place at all nor whether it was of benefit to the participants. It is to these questions that we turn in this section of the course.

The obvious proximate cause of international trade is that, without it, prices of goods and services differ between countries and that, as a consequence, monetary gains can be obtained by purchasing in a country where money prices are low and selling where they are high. Thus absolute differences in the prices of internationally traded commodities determine the course of trade. But the more fundamental enquiry is why money prices differ. Beyond this question is that of whether the monetary gains possible because of differences in money prices reflect "real" gains. What we would really like to know is whether international trade enables us to have available for consumption and investment more goods and services than we would have without it for the same amount of effort.

The answer to these questions is found in the theory of comparative advantage. Different areas are differently endowed with natural resources, capital, knowledge, climate, and labour. For this reason it is obvious that the cost in terms of human effort that is required to produce a particular commodity will differ greatly between regions. It is easier to grow bananas in Central America than in Canada, though, of course, with sufficient expenditure, it would be possible to grow rather second-rate ones even here. This is a case where Central America has an absolute advantage in the production of bananas over Canada. It is in the case of such wide differences in cost that trade is especially profitable. But trade is not restricted to this spot of trade. Most of the international trade that takes place in the world is on exchange of manufactured goods between one industrialized country and another. It is not as obvious as in

the case of absolute advantage that gains arise from trade where one of the participating countries can produce all goods at lower labour cost than can the other countries. This can most simply be explained by the use of a simplified illustration. Let us suppose that Canada can produce both wheat and electrical generators with fewer hours of labour than can the United Kingdom. Let us suppose further that whereas Canadians use one third as many hours as the English to produce a bushel of wheat, they need one half as many hours of labour to produce a generator. In this case the price of generators in Canada relative to the price of wheat is one half higher than in the United Kingdom, i.e., 50% more wheat must be given in exchange for a generator. It is therefore profitable for Canadians to exchange wheat they produce for generators at the English price ratio, and it is profitable for Englishmen to exchange their generators for wheat at Canadian prices. The consequence is a rise in the supply of wheat in England and of generators in Canada until the price ratio in the two countries is the same. Both countries gain, for the price of generators relative to the price of wheat is now lower in Canada than before, and the price of wheat relative to generators is lower in the United Kingdom than before. What has happened is that each country has increased the amount of goods at its command by specializing in the production of the commodity that it could produce relatively more cheaply than the other and exchanging it for the corresponding product of the other country. International trade is thus only a round-about method of production. A country produces export goods in order to obtain import goods, because it is cheaper to do this than to produce the import goods themselves. As we have seen, the principle of comparative advantage shows this to be true even where one of the countries can produce both goods with absolutely less labour than the other.

This explanation can be put in numerical form:

In Canada 10 units of labour produce 30 bushels of wheat or 10 generators. In England 10 units of labour produce 10 bushels of wheat or 5 generators. Let us suppose that the wage in Canada is $2.75, in England $1.10. This makes total costs in Canada for 10 units of labour $27.50, in England $11.00. Thus the unit cost of wheat in Canada is 91¢, of generators $2.75; in England the price of wheat is $1.10, of generators $2.20. Assuming prices to be based on costs, these are the prices that exist in the two countries before trade between them takes place. Once trade between them becomes possible, it will obviously be profitable for Canadians to ship wheat to England and for Englishmen

to ship generators to Canada. This movement will continue until the price of wheat in England is down to the Canadian level and the price of generators in Canada is down to the English level. Both countries benefit from this trade. Previously in Canada 10 units of labour earned 30 bushels of wheat or 10 generators, now they earn 30 bushels of wheat or 12 generators. In the United Kingdom 10 units of labour earned 10 bushels of wheat or 5 generators, now they earn 12 bushels of wheat or 5 generators. Canada, which produces generators with less labour than England, nevertheless finds it advantageous to import generators because it can produce wheat at even lower cost relative to England. An analogy often used to illustrate the principle of comparative advantage is that of an individual who is both the best lawyer and the best typist in town. That he is the best typist does not mean that he will do his own typing for his advantage compared to other individuals in the labour force is greater in law. His secretary is not as much less productive than he is as a typist than she would be as a lawyer, so it pays him to hire someone to type and to concentrate on law where his comparative advantage is greatest.

The validity of the theory that we have outlined above for the purpose of demonstrating that international trade increases the real income of the participating countries depends on the presumption that money costs are proportional to the toil and trouble involved in production. This was, of course, the case in the arithmetical example that we gave, for in it the only costs we considered were labour costs. In the real world labour is not the only factor of production used: capital and natural resources are also employed. But the inclusion of these other factors does not upset our conclusions, and this for two reasons. First, though not the only cost, labour is the principal cost in all industry. In the United States the industry which used the most capital per worker in manufacturing in the early 1930s was the chemical industry where $10,000 was invested per man; the industry with the least capital was tobacco with $1.700. With these figures, if we assume that the average wage rate was $1,200 per annum and that the rate of interest was 5%, then wages would vary from 70% to 93% of the value added to materials purchased by the industry. Thus, though money costs are not exactly proportional to labour costs, the relationship is close. Second, we must remember that the use of capital involves some "real" costs. The accumulation of capital involves abstinence and its use means that it is not being consumed on

goods and services which would give satisfaction. Forgoing the satisfaction of current consumption must be considered as a cost. Thus we find that both the money costs incurred for labour and that incurred for capital involve real costs and we can conclude that the money costs of different goods and services are at least roughly proportionate to the toil and trouble involved in producing these goods. Therefore we can conclude that international trade increases the welfare of the two countries and can make the normative judgment that it is a good thing.

Tariffs

This discussion of the gains that are to be derived from trade naturally leads to the reasons that are advanced for restricting or cutting off trade, and to an evaluation of the consequences of such policies. Trade is reduced by the use of tariffs, administrative chicanery, and quantitative restrictions. This is called protection.

Many reasons and arguments have been given to justify or urge the adoption of tariffs and other types of protection. Most of these are sufficiently fallacious that we do not need to evaluate them here. The most popular of these arguments is that which claims that a tariff protects the domestic wage level by safeguarding domestic labour from the competition of cheap foreign labour. It is true that protection raises the price of the commodities that otherwise would have been imported and stimulates the expansion of domestic production of those commodities. However, the higher prices are paid by the domestic consumer so that the country as a whole is not benefited. In fact, total income declines because the advantages of international specialization are foregone. In reality, wages in Canada are high because the productivity of labour is high, being endowed with a lot of capital and natural resources, and if labour should be used in industries where it is relatively less efficient than foreign workers rather than in industries where it is relatively more efficient (the export industries), this reduces its efficiency and lowers its real wages. If Indians get paid only a few cents an hour, it is because their productivity is low and they have little capital. It is obviously to our advantage to buy from them goods that are mostly hand made, and pay for them with exports of goods that are most efficiently produced with a lot of equipment.

We can now turn to more serious arguments for tariffs. We have already discussed one of them in Study I: in times of unemployment, a tariff, which succeeds in reducing imports and against which other countries do not retaliate, will increase the level of employment in the protected industries and the increased earnings in those industries, being respent, will cause an increase in the general level of income larger than the increase in the surplus on current account. We must remember however that this gain is at the expense of efficiency of production and could only be justified in times of depression when we were unconcerned with the international repercussions of our action. Because Canada is more dependent on international trade than most of the countries with which she trades, we cannot afford to act irresponsibly in this sphere, for similar action on the part of foreign countries, especially the United States, would hurt us more than we could possibly hope to gain. In any case a depression is best combatted by wise monetary and fiscal policies.

A case exists for the protection of newly established industries in a developing economy. This is the "infant industry" argument. It holds that it is too much to expect a newly established industry in a country to compete immediately with imports from other countries where the industry has long been established and operates at the lowest costs, having already reached the optimum scale of production. Thus, even an industry which will have a comparative advantage in the future ought, for the first few years, to be protected from foreign competition. The domestic consumer will suffer for the initial period, but will be recompensed later when this industry grows up and costs and prices fall below the prices of imported goods. Certainly, this is a persuasive argument, but any proposal for the protection of a specific infant industry must be approached with caution. Infants in industry, unlike others, do not necessarily ever grow up. Frequently industries have received protection on the understanding that it would be removed later when the industry had attained its economies of large-scale production, but the industry never actually achieved these promised economies, and the consumer was perpetually burdened by a high cost industry. Thus it should be pretty clear before protection is given an Infant that the industry will eventually grow up to be an adult. If this is in fact possible to forsee, then the further question arises of why private investors are not willing to accept the cost of developing the industry on their own in order to obtain the

future profits. If the future reward is expected to be sufficient to warrant the present cost, businessmen will make the necessary investments themselves; if they are not adequate to reward businessmen, there is no reason why the country at large should incur this cost. Thus the justification for infant industry protection is based on the hidden premise that the government is more clear sighted than the business community and can foresee opportunities for profitable investment which businessmen cannot see.

Tariffs which stimulate the creation of an industrialized economy may affect the institutional setting of a country and the psychological make-up of the people. Underdeveloped countries suffer from a dearth of enterprising individuals willing to engage in business ventures which entail risk, because this is an unfamiliar pattern of life and they lack managerial skills and experience. The governments of underdeveloped countries sometimes hope that they will force the growth of this delicate plant that is entrepreneurial ability by altering the economic structure of their society by the use of protective devices. This is a sociological problem infinitely difficult to solve, for its solution depends on the multiplicity of factors which determine individual motivation, and varies with the particular location and conditions.

Another category of arguments in favour of protection involve the allegation that protection ought to be used to maintain greater economic stability domestically than would be possible under free trade. We can distinguish two branches to this argument. The first is that if a country can cut itself off from economic relations with other countries, it will be able to maintain a stable income. This argument was a very current one in the United Kingdom after the war when the economic fluctuation of the inter-war period were generally considered to be due to American instability and it was feared that the United States might again lead the world into depression. The costs of autonomy for the United Kingdom, which would have arisen from the loss of international trade and of the gains from specialization arising from it, were such as to make autonomy much too expensive a policy to pursue. We must remember that this argument for autonomy is based on the assumption that the country which cuts itself off from economic relations with its neighbours is more competent at stabilizing the level of economic activity than are its neighbours. This then cannot be an argument for protection that could be used with justice

by all countries. The second argument that protection is necessary to maintain economic stability is one which we can call the diversification argument. It holds that the future is essentially unforseeable and that it is unwise to rely on the industries that a country would have in the absence of protection. This is obviously an argument which cannot be used indiscriminately, for whatever a country's particular position might be, it is always possible to increase the number of its industries by protection until the limit is reached where it produces all its domestic requirements and we rejoin the autonomy case. However, where a country is dependent for a large part of its income on only a few industries, the principal ones of which are export industries, a case can be made for some protection which will lead to the growth of other industries supplying the domestic market. This protection leads to a lower income than would obtain with free trade, but it may be judged a price worth paying for a steadier income. Some catastrophe, either a natural one such as a crop failure, or one brought about by a foreign country through restrictions on its imports, or by technological change might strike the principal industries. It might so suddenly lower the income of the country dependent on but a few products as to undermine its social and political equilibrium by the economic suffering it brought if individuals and the government had accumulated reserves during the preceeding period. Achilles' choice of a higher but unstable income is sometimes rejected in favour of a lower but steadier one. All the eggs are not put in only a few baskets.

The principal arguments for a tariff are those which advocate its use to reach non-economic goals. In many parts of the world today, it is held to be axiomatic that it is a "good thing" to be an industrialized nation. It is felt that a nation that is not progressing on the path of creating manufacturing industry cannot provide to its citizens the conditions for a satisfactory existence. In some way, the life of an industrial worker is superior to that in agriculture, and a country with industry is more self-respecting. It may well be that loss in productivity is a price worth paying for these economically unmeasurable benefits, but we cannot evaluate the claim in economic terms.

The necessity of maintaining domestic industries which are vital for purposes of defence is an argument frequently heard in times of international tension. For instance, the

greater part of the justification for the maintenance of a watch industry in the United States is based on the argument that the country cannot afford to become entirely dependent upon Switzerland for its supply of time pieces, even though the latter country produces them much more cheaply, because, in the event of war, the supply of this vital commodity might well be cut off. Furthermore, the watch industry is a training ground for workers capable of making delicate mechanisms necessary in large quantities in war. This argument is unassailable when it argues that a country needs to have certain industries, whatever the cost. But it does not necessarily follow that a tariff is the best method of keeping such an industry operating in the domestic economy. The entire burden of maintaining the industry is borne by the consumer when a tariff is used for this purpose. The price of the commodity is raised above the level at which it would be without a tariff, and consequently, the quantity consumed is less. It is hard to justify making the consumer pay for the maintenance of an industry from which the entire nation benefits. It would be more equitable to keep industries necessary for defence in the country by paying them a subsidy sufficient to make their existence possible out of general governmental revenue. Then the public at large would be paying for the service, and the price could not be higher than the price of the imported product. A further advantage would be that the cost of supporting this industry, very difficult to evaluate when it is done with a tariff, would be evident to all, for it would be the subsidy appearing in the governmental accounts.

The last function of a tariff that we need consider is its role in providing governmental revenue. It is not large: in 1950 only about 10% of total federal government revenue in Canada was derived from import duties. Hence, we can conclude that this is not a compelling reason for a tariff, especially as the national income would be larger without one and therefore taxable capacity would be greater. In any case, the tariff is not designed to maximize the revenue received from it by the government. A tariff eventually reaches the level where it decreases the volume of imports more rapidly than it rises itself, and therefore it decreases revenue. A prohibitive tariff brings in no revenue at all. Of course, we do have a few duties which are exclusively for revenue purposes, for example, the duty on tea and coffee.

Duties, in The Canadian Customs Tariff as in the tariffs

of other countries, are calculated on two different bases. Taxes payable on imports may be fixed at a certain percentage of the value for duty purposes of the imported commodities. These are called ad valorem duties. Duties may also be levied at a fixed number of dollars and cents per physical unit. These are called specific duties. Compound duties, which provide both an ad valorem and a specific rate, also exist, especially on imported textiles in Canada. Imports from all countries do not pay the same duty. Canada has what is called a three column tariff. Imports from the British Commonwealth receive the lowest rates under the column entitled "British preferential tariff." Duties shown in the "most-favoured-nation tariff" column are levied against the export of most other countries and all our main trading partners. Other countries are faced with the "general tariff". Ever since the last few years of the 19th century Canada has given preference in the tariff rates to goods coming from the British Commonwealth. Today the discrimination in tariff rates in favour of British countries has been very greatly reduced, partly because of American opposition to preferential arrangements other than their own and partly because the value of preferences is less than was once supposed. Most of our imports pay duty at the most favoured nation rates, which are the rates applicable to imports from countries with which we have trade agreements. We have promised to treat them as well as any other "most favoured" nation (other than British).

An important feature of the Canadian Tariff Act is the provision for dumping duties. Dumping is correctly defined as selling in a foreign market at a price lower than that at which sales of similar products are made in the domestic market on similar terms. This behaviour is universally considered to be exploitative of the importing country, though, of course, it would not be if it could be assured that dumping would be persistent and last indefinitely. If we can be sure of receiving goods at all times at prices lower than those charged in the country of origin, this will enable us to obtain more goods with our exports than would otherwise be the case. But the danger always exists that dumping is only sporadic and, though it permits purchases from time to time at low prices which benefit the consumer, such practices disrupt the predictions that the domestic industry can make and results in losses to it. Dumping is uniformly combatted by the use of dumping duties which are usuallly equal to the difference

between the price paid for dumped goods and the price at which they were sold in their domestic market. At the end of 1953 the Canadian tariff was amended to provide for increased duties against goods which are sold to Canada at prices lower than the average price charged during the last six months in the country of origin. This was called an "anti-dumping" provision, but this was a misnomer, for there was no question of prices being lower for sales to Canada than for home consumption in the foreign country. The rise in duty is effected by taking the value for purposes of calculating the duty to be the average price over the last six months, not the actual price paid by the importer. This new provision impedes the sale of end-of-season lines in Canada and also makes for a general increase in the effective rate of duty applied to imports in times of falling prices such as the recession of 1953-54.

Tariffs are not the only barriers to international trade. Some countries place outwright prohibitions on the importation of certain commodities. For instance, Canada prohibits the importation of goods harmful to health, such as used or second-hand mattresses, adulterated tea, and white phosphorous matches, and some other categories of harmful goods. On imports of other goods some countries place quantitative restrictions or quotas. They only permit the importation of certain amounts of certain goods. This is a common practice. The United States, for instance, has placed small quotas on the importation of most agricultural products in order to protect her domestic agricultural price support programme.

The manner in which the customs tariff and the tariff act are administered places additional barriers to the importation of goods. Even where all steps are taken for an efficient customs service, delays, uncertainties, and mistakes, are bound to arise, which increase the cost of importing and form a barrier supplementary to the payment of duties. In some cases there is reason to think that the best will is not used in the simplification of customs administration. In the 1930's Canada was one of the worst offenders in using administration to supplement the tariff, principally by the use of ministerial discretion so that the importer could not know by reading the act what might be required of him. Today there is very little hidden protection of this sort in the Canadian customs, but the United States is an offender. We shall discuss the problem of the American tariff in Part III

and need only mention here that uncertainty as to the classification in which imported goods will fall and the basis on which they will be valued for duty purposes is sufficient to impede considerably the operation of importers.

All countries in the modern world use tariffs and have used them in the past, except for the United Kingdom which pursued a free trade policy from the middle of the nineteenth century until after the First World War. The reasons for the omnipresence of tariffs must be sought beyond the mere pressure of the individual industries that are protected. The protection given to most domestic industries raises prices to consumers, and it is difficult to suppose that pressure from small interest groups would always prevail against the general interest. There are limits to log-rolling, and this leads one to suppose that tariff walls would not exist universally if that were their only basis. Some light can be thrown on this problem by an examination of the way in which a tariff redistributes income among broad social groups in a country.

In order to explain the influence of trade and tariff on the incomes of one factor of production relative to that of another, we shall make some simplifying assumptions and later apply our conclusions to the real world. Let us suppose that there are only two factors of production: land and labour-and capital. Let us further suppose that it is the relative amounts of the two factors that countries have, that determines their comparative advantage in trade. Canada has more land relative to labour-and-capital than other countries and thus has a comparative advantage in the production of commodities that require a lot of land in their production such as wheat. Accordingly, Canada produces wheat and exports some of it in exchange for generators which require a lot of labour-and-capital relative to land in their production and are thus more cheaply produced abroad. If Canada now places a tariff against the importation of electric generators, it will raise the price of generators at home and make their production in Canada profitable. Firms will begin to produce generators and attract factors of production in order to do so. The important point is that the two industries use the two factors in different pro portions. Thus, if land and labour-and-capital are released from wheat production to generator production in the proportion in which they had been used in wheat, there will be a surplus of land in generator production and rents will fall relative to

returns to land-and-capital. Conversely, if the two factors are released from wheat in the proportion in which they are used in generator production, proportionately more labour-and-capital than land is withdrawn from wheat and rents will fall relative to the returns to labour-and-capital. We conclude then, that the tariff has increased the income of one factor, labour-and capital, relative to that of the other, land. Since the total income has fallen because of the loss of the gains from international specialization, we can be sure that the income of landlords will now be lower than before in absolute terms. Landlords get a smaller share of a smaller national income. Labour-and-capital gets a larger proportion of a smaller total income. Though we cannot prove it here, it is demonstrable that the increase in share is sufficient to provide an absolutely larger income for this factor. We can then expect to find support for a tariff, not only from the labour-and-capital engaged in the generator industry, but also from this factor engaged in wheat production, for its relative scarcity there too is increased by the tariff, and therefore its income is raised.

It is usual to consider that in the real world there are not two but three factors of production: labour, capital, and natural resources. This analysis becomes too complicated for our purposes under these conditions. But we do not need to go beyond the two factor case to throw light on some actual historical episodes. Before the industrial revolution, England had a small population relative to its land resources and, accordingly, it exported agricultural products, principally wool and wheat. During the agrarian and industrial revolution, England accumulated capital rapidly and its population grew so that, by 1815, it had lost its comparative advantage in agriculture and was the great industrial power of the time. The landlords, who controlled Parliament until the Reform Act of 1832, were proponent of the Corn Laws, the duties on imported wheat, and argued, quite correctly, that the Corn Laws decreased the share of the national income going to labour. When political power shifted more in favour of industrialists and workers, the Corn Laws were repealed (1845), and the distribution of the increased national income favoured the industrial groups more. During the nineteenth century, the United States was amply endowed with land relative to labour. In that country, the political power of labour and capitalists ensured the erection of a high tariff barrier. Thus diametrically opposed tariff policies in the United Kingdom and in the

United States both represented victory for working people, for relative factor proportions in the two countries differed. In the first case, labour was the abundant factor, in the second, the scarce. Today the United States has so grown in wealth and population that its comparative advantage is no longer in agriculture. Today representatives of the large industrial unions and of big manufacturing interests are becoming increasingly sympathetic to lower tariffs and farmers are becoming increasingly protectionist.

We have seen in this discussion that the beneficial effects of tariffs are less than is commonly supposed and that where protection is needed, as in the case of defence, it is usually better to achieve the same goals by the use of subsidies. This does not mean, of course, that tariffs should all be immediately abolished. Industries have been established with the reasonable prospect of future tariff protection and they should not be let down suddenly. Vested interests have a case and protection should be removed from them only gradually to prevent them from making new investments unless they can operate at a profit without protection. Furthermore, the mobility of labour, especially of skilled labour, is often low, and men should not be deprived of their job suddenly and lose the advantages that their acquired skills give them. The ideal solution would be to lower protection so that the industry would not contract any more rapidly than men retire from the labour force of that industry. Of course, tariffs should not be removed during periods of unemployment, but only during prosperity when opportunities for movement to other industries are plentiful.

Since the last war Canadian tariff policy has been quite enlightened. Duties on most articles have been lowered slightly. This policy is not based on the conviction that tariffs are undisirable of themselves. Indeed, official action leads to the conclusion that the government considers that any domestic industry that wants protection is entitled to a tariff of between 15 and 30 per cent. The conviction on which Canadian commercial policy is based is that a high level of prosperity and income in Canada in the future will be based on a high level of international trade. For this reason we have consistently advocated in international conferences the rejection of quantitative restrictions on trade and the lowering of tariffs all around. We have not wished to give a bad lead to other countries by raising our own tariff nor to provoke them into retaliation, but have, on the contrary, usually been willing to match reductions in their tariffs by reductions in ours.

STUDY NO. II

A S S I G N M E N T

Answer Questions 1 and 2 and any other 2 questions.

1. How would you apply the theory of comparative advantage to trade between people within a country?

2. Do low wages mean low labour costs and low prices?

3. "Trade is the exchange of equal values, hence no gain arises from it" Comment on this view.

4. What do you think is the single most favourable argument for a tariff?

5. Can protection be justified on non-economic grounds? Explain.

6. "Import quotas and exchange controls are much like tariffs". Discuss.

7. What is dumping? Can protection prevent it?

8. Is protection a source of revenue? Explain.

STUDY NO. III

THE WORLD ECONOMY SINCE WORLD WAR II

The Dollar Shortage

The war bore with greatly varying incidence on the different countries of the world. The countries that had been occupied by Germany and Japan had been completely cut off in their economic relations with the dollar and sterling area. Inflation in those countries had been much less effectively controlled than in unoccupied countries. Most of them had suffered from serious direct damage to their economic assets and also from inability to replace worn-out equipment. They emerged from the war with a greatly reduced productive potential and a currency which had only a small fraction of its pre-war value. Most other countries did not suffer from an acute inflation; in each there was some, though not of uniform degree. Many of them emerged from the war with less assets than they had had. The United Kingdom, for instance, had suffered from direct war damage, had been unable to replace some of her items of wealth that wore out during the war, and had spent much of the foreign assets she had had before the war. She even became a net debtor vis-a-vis the rest of the world. Her price level had not risen very greatly, but shortages were acute, so that purchasers could not buy what they wanted at the low controlled prices. Other countries emerged from the war richer than before. These countries were those outside the area of fighting; they had increased their investments in plant and machinery in order to produce war goods and their productive potential was greater than ever. Canada was one of these fortunate countries. The degree of inflation in these countries varied greatly, from very little in North America, to very considerable amounts in South America, India and Egypt, for instance. Germany and Japan suffered very heavily. The German currency fell so far in value that it disappeared.

The question which arose when trading relations were resumed was what pattern of exchange rates to establish. Patently, the pre-war rates of exchange would, in many cases, have been quite inapplicable. Australian prices had risen only 45% between 1938 and the end of 1946, whereas they had increased seven-fold in France and twenty-fold in Greece. Though it was

obvious that the old parities would not do, it was impossible to foresee what would be satisfactory rates when countries had recovered from the war.

If the rates had been allowed to go free at that time, the extremely strong demand for imported goods and services existing in the countries that had suffered from both damage and inflation would have pushed the external value of their currencies so low as to give rise to danger of complete loss of faith in their currency by the public and of run-away inflation. This was especially serious in countries where the government was not firmly constituted. Free rates of exchange were rejected.

Most countries wanted an exchange rate that was quite high relative to the dollar, the currency in which most of their immediate purchases were to be made. Having an overvalued currency keeps down the price of imports, and this was an important aim of countries where one of the principal problems was that of combatting inflation. The quantity of money was large, goods were scarce, and price control was difficult to administer. Keeping down prices of imported goods avoided the danger of giving prices an upward push which might set off a general rise. This was especially the case because imported goods were largely food-stuffs in the immediate post-war period and, if those had gone up in price, demands for wage increases would have been difficult to resist, giving more fuel to the inflation. A high exchange rate is an advantage in all cases, for it means that imported goods are cheap in terms of the domestic currency. But usually, a disadvantage also exists: domestic prices are high for foreigners and hence a high rate of exchange reduces exports below the level at which they would otherwise be. But at this time, war-damaged countries had very limited exports because of their unability to produce. There were general scarcities of most goods and it was not price but the absence of goods that retarded export. Hence, the usual disadvantage of an overvalued rate did not exist. These considerations led to the adoption of overvalued rates relative to the United States dollar by most of the countries of the world after the war. This policy appears today to have been reasonable, but there is no doubt that most countries persisted too long with their overvalued rates. The rates were not lowered for some time even after overvaluation began to retard the exports that these countries could have made to the dollar area and to each other to pay for their

imports. A number of countries: France, Italy, Greece, devaluated their currencies in 1947 and 1948, but it was not until September 1949 that the pound was devalued and brought with it a wave of devaluations. The pound had been devaluated by 60 cents to U.S. $4.03 at the outbreak of war in 1939. During the war, the economic position of the United Kingdom deteriorated whereas that of the dollar countries improved. The rate of £1 to $4.03 was nevertheless not changed until 1949, when it was reduced by 30% to $2.80. The sterling area's balance of payments position improved considerably as a result of the 1949 devaluation.

Of course, the control of purchases on current account was not the only problem of countries with overvalued rates. Governments wanted to reduce purchases on current account, as we have seen. They also stopped, to the best of their ability, any outflow of capital whatsoever. All the funds a country earned were to be devoted to purchasing urgently required consumer goods and equipment, and none were to be used to purchase securities abroad. Control was necessary because the public wanted assets in foreign currencies, chiefly the dollar, because it feared the eventual devaluation of national currencies other than the dollar, and because, in many cases, it felt that property rights were more secure in North America than in their own country.

In the post-war world, the pattern of exchange rates was such that disequilibria existed in the balance of payments of most countries. They were short of the currencies of some countries and had excessive amounts of currencies of others. The quasi-universal characteristic of countries was that they were short of United States dollars. This is what was meant by the "dollar shortage". The world at large wanted to buy goods, services, and securities from the United States in excess of the dollars that were earned. In most countries monetary demand for consumption goods, investment goods, and government purposes exceeded the capacity to produce. The result was inflation at home and excess demand for foreign currencies. Because North America had unimpaired production facilities, much of this demand was for dollars. A generally scarce currency was given the name of "hard" currency. The United States dollar was the hardest, closely followed by the Canadian dollar, the Swiss and Belgian francs. Currencies that were in ample supply to most countries were called "soft" and there

were different degrees of softness as well as of hardness.

The period of acute strain of the balance of payments of European countries did not, in most cases, last beyond the devaluations of 1949. By 1950, inflation had been halted and production had regained or passed the pre-war level. Exchange control is still in use today, but the gap between the demand and supply of foreign currencies is not large in any of the major countries and progress is being made toward the position where the public of those countries will be able to freely purchase current account items wherever they will, though there is no prospect of free capital movements being allowed toward the dollar area for many years to come.

Exchange Control

We must now turn to the techniques used to maintain an over-valued rate and to the problems to which they give rise. An over-valued rate is one where the demand for foreign currencies for all purposes exceeds the supply of foreign currencies that a country earns. This rate can be maintained without interference with the freedom of action of individuals if the government is willing to sell from its reserves the difference between what is demanded and supplied. But, after the war, very few countries had reserves of gold and United States dollars adequate to meet such demands. The alternative method is exchange control, and that was nearly universally used. Exchange control is where foreign currencies cannot be purchased or spent without permission from the government. Thus the government only permits as much foreign exchange to be spent as is being earned by the country, even though the public would like to spend more.

The task of the authority that is put in charge of administering the exchange control, in Canada it was the Foreign Exchange Control Board, is a very difficult one. The first thing that it must do is, of course, to make sure that all the foreign exchange earned by residents of the country is delivered to it so that it can then distribute it again for authorized imports. This may be difficult if the public is reluctant to co-operate, but it can be accomplished more or less efficiently by not permitting any sales of goods, services or securities to foreigners without permission, and then policing this rule through the Customs and through the banks. The real difficulties come in the allocation of the foreign exchange earned, for the demands

cannot all be satisfied and the civil servants in charge must decide as to the relative worth of all the claims. They must decide how much foreign exchange is to be allotted for each purpose: the purchase of goods and services abroad, the payment of interest and debts, tourist travel abroad, and a host of other categories. They must then decide how much is to be spent on each good and service imported. They must decide what firms are to be allowed to do the importing and from what countries the imports are to come.

Hundreds of thousands of different types of purchases are made abroad in a period of a year. When exchange control is imposed, a group of government officials are required to reduce the amount of purchases made by cutting out the less essential expenditures. But they have no criteria to guide their choice. Price theory teaches us that prices reflect the relative value of goods and services to a society, and brings about the most efficient use of goods and services to satisfy that society's wants. Exchange control involves the rejection of the price system and the placing of limits on purchases individuals would make if free to act as they wanted in response to prices. Decisions as to what is to be bought must be made on other grounds than price. It is impossible to decide in a particular case, as in the abstract, whether the last dollar to be spent on imports should be spent on the purchase of fresh fruit, machine tools, the repatriation of domestic securities, or any of countless other possibilities. In practice, one observes a bias against "luxuries" and consumer goods; but surely there must come a point where a dollars' worth of lip-stick increases the satisfaction of the society more than another dollars' worth of oil drilling equipment. The usual way in which these problems of official choice are resolved is to allow the importation of foods and services on the basis of a past period. Thus, imports of each commodity in the year when exchange control is applied might be allowed up to a certain percentage of the previous year's imports. The weakness of this solution is that if, as is likely, conditions of production or tastes change, last year's consumption pattern may not be the most appropriate one for this year. The longer the period during which exchange control lasts, the more remote and irrelevant becomes the base period's pattern of importation. At this stage, officials must deal with each request for an import licence on an ad hoc basis and the decisions may not correspond to the unmeasurable real relative intensity of desire of the economy for different goods, however conscientious and competent the officials may be.

Exchange control also gives rise to problems of justice. When permission to import is rationed, those who are able to import will be able to make an extra profit. Usually the price of goods abroad and at home are the same, allowance made for transportation costs and the tariff. But when imports are restricted, scarcity sends up the domestic price, and this equality no longer holds. Thus the importer makes, not only his normal profit from carrying on his business, but also the difference between the foreign and the domestic price, a difference which grows with the stringency of the restriction. Competition does not obliterate this abnormal profit, for competitors cannot come in, licences being restricted. Two methods are often used to remove this monopolistic profit from the fortunate few importers. One is to auction off the licences. Competing importers bid the price up until it is equal to the abnormal profit which the government now accordingly makes. The other is to impose an excise tax on these goods which is judged to be equal to the increase in price that the controls are going to cause. In this case too the government makes the profit.

This latter alternative has the second advantage of not permitting the production of import-competing goods to become too attractive. One of the very serious dangers of exchange control is that it tends to build up vested interests. When imports of certain goods are curtailed, their price goes up, and it becomes more profitable to produce them domestically. If nothing is done to offset it, the domestic production of these goods increases, and this has two consequences. First, resources which might well be devoted to producing more export goods to pay for cheap imports, are attracted away from the export industry, thus slowing the hoped-for return to balance of payments equilibrium. Second, these industries once established, knowing they would disappear or at least have difficulties if the protection of exchange control were removed, use what influence they may have to perpetuate the controls. For the sake of avoiding difficulties in a return to a free market, it is usually advisable to place an excise tax on goods which rise in price as a result of the controls, whether they are produced at home or are imported.

Loopholes exist in any system of exchange control. By legal or illegal means, the residents of a country are able to carry on some transactions that are not intended by the control authority. These possibilities of escape give an unusual advantage to the more informed and to the more unprincipled. They also introduce a degree of flexibility into the system which permits

the satisfaction of any very urgent demands which the administrators may ignore or be unwilling to satisfy. Loopholes in exchange control discourage its use by making it a less effective instrument than it would otherwise be to control international demand for foreign goods. The particular techniques that can be used to escape the spirit if not necessarily the letter of the law differ with the particular case, but the most important and usual techniques can be mentioned here. The most important path through which capital movements are made is by the alteration of the timing of payments for imports and exports. For instance, if residents of a currency area think that the value of their currency is going to fall, they will want to export capital in order to bring it back later by buying back their own currency at the now lower price. An outflow of speculative capital can take place by speeding up payment for imports, which decreases the importers' debts abroad (decreases foreign borrowing), and by slowing down payments received for exports, which increases exporters' assets abroad. When the movements take place simultaneously, a very large change in a country's international indebtedness can take place. Such action puts pressure on the exchange control, for it increases demand for foreign currency for imports, and decreases the supply of foreign currencies from exports. These practices cannot be eliminated completely even by very rigid exchange control because regulations which interfere seriously with a trader's freedom of action also reduce his ability to do business. Except in times of crisis of confidence, a certain slack exists in exchange control systems. The converse of the occurrence described above can also happen. If it is expected that foreign currencies are going to fall in value, importers delay paying for imports and exporters demand payment as promptly as they can or even demand prepayment. But this is unlikely to occur under a system of exchange control, for exchange control is not used by countries whose currency is strong enough to appreciate. Appreciation reflects greater demand than supply of that currency and no need, then, to curtail imports. Some very special cases may exist where the strength of the currency is due to exchange control.

The most obvious device for exporting capital is the simple one of smuggling currency out of a country and selling it abroad for the currency of a foreign country. The free market in many currencies, for instance the French franc, is principally supplied from this source. Inside France, the official rate for foreign currencies is determined by the monetary authorities.

But when French francs are sold abroad, say in Switzerland, French authorities have no influence on its price and it sells for whatever it will bring according to the relative force of demand and supply. Free rates for exchange controlled currencies are typically lower, and only by fluke higher, than the official rate. While Canada had exchange control, a free market in Canadian dollars existed in New York and elsewhere. This market was principally supplied by the sale in Canada of Canadian securities held by non-residents who were allowed by the Foreign Exchange Control Board to dispose of the Canadian dollars so acquired in any manner they wished. The existence of a free market gives rise to some peculiar situations. Before the devaluation of the poind sterling in 1949, its official value was U.S. $4.03 whereas its free value in Switzerland was between $2.50 and $2.80. This spread made it possible for British tourists to buy their tourist allowance of £50 worth of Swiss francs from the British exchange control authorities, take a plane to Switzerland, have a gay week-end, buy £ 50 on the free market with the Swiss francs that remained, and return to England having had a free holiday at the expense of the British Treasury.

The most frequently encountered method of exporting capital illegally other than smuggling, is the overvaluation of imports and the undervaluation of exports. An importer who overvalues his purchases abroad, receives foreign exchange equal to the declared value, uses only a part of it to pay his debts, and keeps the rest as a capital export. Similarly, an exporter who succeeds in making the control authorities believe that he is being paid less for his exports than he is actually receiving, is obliged to turn over to them only a part of his earnings, and has thus acquired foreign assets of which there is no trace.

International Economic Institutions

Forty-four nations participated in the Monetary and Financial Conference at Bretton Woods in July, 1944. The purpose of this conference was to build up agreement on how international monetary relations would be carried on after the war. Proposals for the charters of two international organizations were drawn up. These were the charters of the International Monetary Fund and of the International Bank for Reconstruction and Development, which were later ratified by the governments of most of the free countries of the world.

The International Monetary Fund is a body designed to regulate the exchange rate and exchange control practices of member powers. The philosophy which underlies its operations is that exchange rates should be generally stable and that exchange control should not be used. However, exceptions to these general rules are provided. If a country is in "fundamental disequilibrium", it may alter its exchange rate, but only to another fixed level. If the disequilibrium is expected to be only temporary, the Fund has funds that it can lend that country to tide it over its period of difficulty. The Fund thus provides a breathing space to member countries during which they can take measures appropriate to meet their problems without having to resort to devaluation or exchange control. Exchange control on current account items is only permitted under the charter of the Fund during the period of "post-war transition", though control of capital movements is always permitted.

The influence of the Fund has disappointed many expectations. The reason for this is that post-war difficulties have been much more serious than had been anticipated. The lending resources of the Fund have been much too small to be adequate. In addition, it refrained from lending to countries receiving Marshall Plan aid, so that it has not played a central role in recent monetary affairs. Even now, ten years after the end of the war, countries are still invoking the transitional provisions to justify their continued use of exchange control. In fact, then, the system of which the Fund was to be the guardian has not yet come into being. It may never come into being as it was planned in 1944, for opposition to a general system of fixed exchange rates is increasing and many countries would prefer to continue or experiment with a free rate.

The International Bank for Reconstruction and Development has a much more conventional purpose than the Fund. It came into existence to supplement private sources of international capital. At first, most of its loans went to countries repairing the damage from war, but, since 1949, it has directed most of its loans to underdeveloped countries. The Bank has a capital of $10 billion of which the member countries have paid in 20%. In addition to lending these funds, the Bank can borrow in the financial markets of the world and lend the proceeds of its bond flotations, and it can also guarantee private loans thus lowering the rate of interest charged on them. The Bank lends only to governments or firms owned and guaranteed by governments.

The Bank has followed a fairly conservative policy. Its lending has been on lines similar to those of a private bank, partly because it must instil confidence in financial circles in order to be able to borrow cheaply itself, and partly because it is felt that gifts should not be made in the guise of loans. One of the principal difficulties the Bank has found in searching for appropriate loans to make is the lack of competence of officials of underdeveloped countries in economic matters. In these countries, where capital is exceedingly scarce, the applicants for loans are sometimes incapable of using funds they could get. However this may be, the Bank has made a very good return on the loans it has made. This fact reflects that the private financial community, especially in North America, having burned its fingers with loans to South America especially in the 1920s, has not resumed foreign lending even when it is profitable. This lack of private lending is one of the causes of the "dollar shortage" and of the necessity for public lending institutions.

The Export-Import Bank is a bank similar to the International Bank and makes loans that private lenders will not make on what it considers reasonable terms. It is owned by the United States government.

It was originally intended that the International Monetary Fund, which deals with the regulation of monetary relations, should have, as a parallel organization, an International Trade Organization, which would regulate tariff practices and quotas. A meeting of twenty-three nations was held in Geneva in 1947 to draw up a proposed Charter for the world trade body. These nations drew up an agreement that made provision for uniform application of tariff laws in order to reduce administrative protection, and that set up rules limiting the use of import quotas and prohibitions, the latter to apply after the post-war transition period. In addition, these nations engaged in tariff bargaining. Each nation bargained with each other nation, over the items of which the other was its principal supplier. The rationale was that, by making countries offer mutual concessions only on items of chief interest to themselves, tariffs would be reduced the most. Tariff reductions arrived at in the course of this network of bilateral negotiations were then extended to the whole group. The negotiating countries not only reduced their tariffs (the United States was the leader in this process), but also signed the draft charter so that it would apply amongst themselves. It was called the General Agreement on Tariffs and

Trade (GATT). This was the most hopeful time for international trade liberalization in the post-war period. The next year, a Conference of the entire United Nations was called at Havana to draw up a trade charter and create an organization on the basis of the work done at Geneva. A charter was drawn up but was ratified only by Liberia, the other countries waiting for the United States to ratify it before they did, but the United States failed to do so and the ITO died of neglect. GATT continues as the basis for regulating the trade practices of the major trading countries. New members have been admitted, but very little progress is being made in limiting the use of quantitative restrictions and in reducing tariffs. The United States, which was the principal proponent of lower tariffs right after the war, has modified its views and now prefers to obtain the consent of other countries for its use of quotas on agricultural imports to reducing its tariff and those of other countries.

Other economic organizations exist, but they are of a regional sort. Under the United Nations Economic and Social Council are three bodies: the Economic Commissions for Europe, for Asia, and for Latin America. These bodies do research and give advice. In Europe we find the Organization for European Economic Co-operation. This body grew up as the European counterpart of the Economic Co-operation Administration which was the American organization charged with distributing Marshall aid. The OEEC includes the sixteen European countries receiving aid. It worked out plans for European development according to which American funds were spent and has since continued to perform very valuable work in co-ordinating European economic policies. The European Payments Union is an organization closely tied to OEEC. It clears the debits and credits arising from payments among member countries. Countries which are in over-all debit with all the other countries in the union pay part of their debt in gold and receive credit for part of it from the Union. The proportion which must be settled in gold or in credit depends on that country's cumulative position. A country which sells more to its partners than it buys receives part payment in gold and in part extends credit to the EPU. EPU has greatly facilitated multilateral payments in Europe and is a first step toward the goal of general convertibility where each country's currency can be used to make purchases in any other country.

The United States in the World Economy

In our discussion of the dollar shortage we saw that, in the immediate post-war years, the dollar was the scarcest of currencies. The causes of this scarcity were that the war had hit most of the world harder than the dollar area which had expanded in productive power, that technological progress seemed then as now to be most rapid in the United States, and that poorer nations tried to accomplish more in the way of reconstruction and development than they had resources with which to do it. By the dollar area is meant the United States and those countries whose currencies can be freely sold for dollars.

The United States did not prove to be unconscious of its good fortune relative to the rest of the world nor of the responsibility that this thrust upon it. In the first few post-war years, when the problem of reconstructing the world economy appeared less difficult than it really was, the United States made substantial loans to foreign countries; the largest of these was the $3.3 billion loan to Britain. Later, when it became apparent that the position of Europe was still critical, the United States embarked on a programme of huge gifts. This was the Marshall plan. In more recent years, the United States has shifted the emphasis of its gifts from those for economic reconstruction and development to those for military purposes, but they are not a smaller burden on the American tax-payer because of that. In the years 1947 to 1954, American grants to the rest of the world were $1.8 billion, $4.1 billion, $5.2 billion, $4.0 billion,$4.4 billion, $4.5 billion and $6.4 billion respectively. In addition, loans were made, most of which were motivated by non-economic motives. I do not wish to suggest here that the motivation for these loans was entirely altruistic, though this motive has played its part, especially in the first years. The United States has realized that its immense production was an effective instrument in the political struggle with the Soviet Union. With it the United States could strengthen its allies and win the good-will of countries not yet committed to its side.

Canada made loans to Britain and European countries after the war that were a larger proportion of its national income than American loans were of the American national income. But, when Canada got into exchange difficulties at the

end of 1947, these loans were very much reduced and ended in 1948. Since then Canadian contributions to the welfare of other countries have been small. They have been limited to gifts of military equipment and to a yearly gift of approximately $25 million to the Colombo Plan which helps the development of India, Pakistan, Ceylon, Burma, and Indonesia.

Today the United States is still running a surplus of private transactions on current account, but it is much reduced in size from 1947. Since 1950, United States government aid and military expenditures abroad have exceeded the private surplus on current account except for 1951. This has meant that an outflow of gold from the united States has taken place and a net inflow of capital from abroad. But the balance of payments problem of the rest of the world vis-a-vis the dollar area is not solved for all that. Most countries still have severe discriminatory restrictions against imports of goods and services from dollar countries and control capital movements to those countries carefully. Should these controls be removed, expenditures in the dollar area would increase considerably and would probably more than wipe out the surplus on current and government account. If the United States should reduce the scale of its foreign military expenditures, other countries would again feel some pressure against their exchange reserves and their exchange rates, though not at all as intensely as in earlier years.

The question of what steps can be taken to restore completely the international position of non-dollar currencies. Referring back to Study I, we might note that Canada has solved her balance of payments problem by adopting a free rate of exchange. Germany, which has made more rapid progress than any other European country, has achieved this principally by strictly limiting internal demand. For some months in 1950 Germany ran a very large deficit with the rest of the world. She took vigorous counter-inflationary monetary measures and has had a surplus on current account since that time. Of course, these prescriptions may oversimplify the pattern that could be followed by other countries, for Canada emerged from the war with no real problems, and Germany, unlike other European countries, had since the war not been burdened with military expenditures and conscription.

The United States could do much to ease the problem of adjustment that faces countries in delicate balance of

payments positions by importing more freely the goods they produce. European countries can earn more dollars either by exporting directly to dollar countries, or by selling more than they buy to third countries which in turn export to dollar countries and can pay Europe with the dollars that they earn. This latter pattern was typical of the pre-war period and, to a large extent, is still the dominant trade pattern. But Europe now does not earn enough dollars, because during the war she lost most of her foreign assets which had provided an income in the past with which to pay for imports. In addition North Americans have replaced her as suppliers of many non-dollar markets, notably South America. Thus it is important to them to sell more goods and services directly to the United States. But there they face the United States tariff.

The average level of the United States' tariff is very low: around ten per cent. But the average amount of duty paid by imports is a very slippery concept. Most imports of raw materials into the United States pay either no duty or very low duties. Minerals, rubber, and lumber, for instance, pay low ad valorem duties. Some imports in a special position, such as newsprint which has the protection of newspaper publishers, pays no duty at all. Because raw materials and special products are imported in very large, and indeed increasing, quantities to meet the requirements of the great industries, and because these products pay very low or no duties, this gives a low average duty to all imports. But manufactured goods generally pay very high duties, and Europe is an exporter of highly manufactured products. Though the United States has reduced its tariff considerably since 1932 when the peak was reached with the notorious Smoot-Hawley tariff, many commodities still pay duties of fifty per cent and more. Thus reduction in the American tariff would be of aid to European exporters.

The American tariff has other characteristics in addition to its height that makes it highly protective of manufacturing industry. The importer can never be sure that the rate of duty applicable to his product will not be raised in the future in response to the complaints of domestic manufacturers whose sales are reduced by imports. This is a very effective deterrent to imports, for businessmen are reluctant to spend time and money developing sales of a foreign product in the United States, if they may be faced with

increased duties should they be successful in obtaining an appreciable share of the market. In addition to this obstacle are many in the administration of the customs act. Businessmen complain of delay in the administration of the law, of the impossibility of obtaining a change in a ruling without going to court, of the very complex classification of imports which makes it impossible to tell into which class a commodity will fall and hence the duty to which it will be liable, and of changes in the class in which a commodity is placed even after it has already been imported. It has also been alleged that other regulations such as pure food and drug acts, marking requirements, and animal and plant regulations have been used for protective purposes for which they were not intended. These aspects of importing have been called the "invisible tariff". The United States has not yet altered its customs practices to conform to all the requirements set out in the Articles of Agreement of GATT which the United States government signed in 1947.

The United States protects its manufacturing industries by the tariff; it protects its agriculture by the use of quotas. These are of special interest to countries that would otherwise export large quantities of agricultural goods to the United States, such as Canada, and indirectly to European countries, because some agricultural countries, by earning more dollars, could pay them with dollars. The origin of the agricultural quotas is to be found in the American price-support programme. Unsatisfied with world prices, American farmers have prevailed upon their government to purchase agricultural products to prevent them from falling below a certain level. Unfortunately, these levels are usually considerably above the world price for these commodities and foreign producers find it very attractive to export to the United States. But the American tax-payer, paying as he does both higher prices for the agricultural produce he purchases and taxes to buy "surplus" American produce to keep the prices high, does not want to buy the produce of foreign farmers in addition. In order to keep foreign produce out, tariffs served for a while, but as the differential between domestic and world prices widened, quotas were resorted to. Were it not for the price support programme which keeps prices very high, American agricultural production would be lower and the United States would be a net importer of many agricultural products. The principle of comparative advantage tells us that the national income of the United States would be greater than

it is if this protection were removed and American resources were devoted to those tasks that it can do relatively better than agriculture.

The paradoxical position of the United States, which urges other countries to renounce the use of exchange control and quantitative restrictions, while itself insisting on the right to protect its farmers in this extreme way, is the principle source of its loss of leadership in the struggle to promote freer world trade. The 1955 meeting of the signatories of GATT nearly foundered because of the demand of the United States that its agricultural quotas be approved on a permanent basis. The United Kingdom has replaced the United States in some small measure as the protagonist of freer trade. Canada, whose stake in free world trade is very great, vigorously supports whichever power is on the side of the angels.

STUDY NO. III

A S S I G N M E N T

Answer any 4 questions.

1. Why is international co-operation in international monetary and trade matters of vital importance?

2. What are the world's most important post-war economic problems? What can be done about them?

3. Do you expect that a war scare would improve Europe's dollar position?

4. What are the principal effects of exchange control?

5. Officials who administered exchange control in Canada in 1947-1950 would not be eager to deal with another "dollar shortage" by the same technique. Why?

6. Why has the International Monetary Fund not dominated post-war international monetary arrangements? Do you consider this unfortunate?

7. "Not one Canadian industry would be sacrificed because of Canada's adherence to G.A.T.T.". Comment.

8. Will American tariff laws, if unchanged, doom Europe to perpetual exchange control?